

SUPPLEMENTARY DATA

Supplementary Table 1. Comparison of maternal and neonatal characteristics between mothers with normal glucose tolerance (NGT) and gestational diabetes mellitus (GDM).

	NGT (n=794)	GDM (n=132)	<i>P</i>
Maternal characteristics at pregnancy			
Age at EDC (year)	31.0 ± 4.6	33.1 ± 4.4	< 0.001
Pre-pregnant BMI (kg/m ²)	20.8 ± 2.8	21.8 ± 3.0	< 0.001
Gestational weight gain*			
below recommendation	142 (18.3)	14 (10.9)	
within recommendation	322 (41.4)	56 (43.8)	0.12
above recommendation	313 (40.3)	58 (45.3)	
Prenatal smoking	10 (1.3)	4 (3.0)	0.13
Prenatal alcohol use	1 (0.1)	0	1.00
Parity			
0	487 (61.3)	60 (45.5)	
1	251 (31.6)	60 (45.5)	0.003
≥ 2	56 (7.1)	12 (9.1)	
Paternal BMI (kg/m ²)	23.3 ± 3.4	23.6 ± 3.4	0.37
Pre-eclampsia	15 (1.9)	1 (0.8)	0.72
Primary Cesarean delivery	147 (18.5)	26 (19.7)	0.75
Family history of DM	168 (21.2)	38 (28.8)	0.05
Maternal characteristics after pregnancy			
Mother had subsequent pregnancies	268 (33.8)	28 (21.2)	0.004
Mother diagnosed with GDM in subsequent pregnancies	27 (10.1)	10 (35.7)	0.001
Mothers' glycemic status at follow-up			
Prediabetes (IGT and/or IFG)	72 (9.1)	35 (26.5)	< 0.001
DM	4 (0.5)	9 (6.8)	
Neonatal characteristics			
Male:Female	425:369 (53:47)	57:75 (43:57)	0.03
Gestational age at delivery (week)	39.6 ± 1.1	39.5 ± 1.2	0.52
Birth weight (g)	3,200 ± 387	3,335 ± 403	< 0.001
Sum of skinfold thickness (mm)	11.8 ± 2.2	12.9 ± 2.8	< 0.001
Percentage of body fat	9.6 ± 3.2	11.2 ± 3.5	< 0.001
Large for gestational age (%)	76 (9.6)	23 (17.4)	0.01
Cord-blood serum C peptide (µg/l)	1.0 ± 0.5	1.2 ± 0.6	0.01

Data are mean ± SD, number (%).

*According to the recommendation in the latest 2009 guideline of Institute of Medicine.

BMI, body mass index; EDC, expected date of delivery.

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Supplementary Table 2. The associations of maternal and neonatal characteristics with abnormal glucose tolerance in offspring at the follow-up assessment.

	OR of abnormal glucose tolerance (95% CI)
Maternal characteristics at pregnancy	
Advanced maternal age (≥ 35 years)	1.05 (0.34–3.19)
Maternal obesity (pre-pregnant BMI ≥ 25)	2.08 (0.59–7.30)
Gestational weight gain exceeded IOM recommendation	0.50 (0.18–1.41)
Multiparity (parity ≥ 1)	1.28 (0.52–3.19)
Neonatal characteristics at delivery	
Birth weight ≥ 4.0 kg	2.00 (0.26–15.6)
Large for gestational age (birth weight $\geq 90^{\text{th}}$ percentile)	1.58 (0.45–5.51)
Small for gestational age (birth weight $\leq 10^{\text{th}}$ percentile)	0.87 (0.20–3.81)
Adiposity (sum of skinfold $\geq 90^{\text{th}}$ percentile)	0.59 (0.08–4.49)
Cord-blood serum C peptide $\geq 90^{\text{th}}$ percentile	1.31 (0.29–5.79)
Parental characteristics at follow up visit	
Mother diagnosed with DM	4.67 (0.57–38.5)
Maternal obesity (BMI ≥ 25)	2.21 (0.88–5.56)
Offspring's risk factors at follow up visit	
Girls vs boys	0.62 (0.24–1.59)
History of breast feeding	0.36 (0.13–1.00)
Exercise level [†]	1.95 (0.26–14.8)
Obesity (BMI $\geq 95^{\text{th}}$ percentile)	3.07 (0.99–9.51)
Overweight/obesity (BMI $\geq 85^{\text{th}}$ percentile)	2.39 (0.89–6.38)
Adiposity (sum of skinfold $\geq 90^{\text{th}}$ percentile)	3.24 (1.14–9.21) [*]

^{*}P value between 0.01 and < 0.05 ;

[†]Sedentary (Grade 0–2) vs somewhat active to active (Grade 3–10); BMI, body mass index; IOM, Institute of Medicine.